













During this period, the investment strategies of this study can be very profitable. The index composition of the price information entropy proposed in this study can be changed at any time according to investors' familiarity with technical indicators, so as to adapt to the changes in the public's investment psychology in the future. The emphasis of this study is not on finding a 100 percent profitable model, but on building a model that can manage market uncertainty. Various possibilities for future market changes based on this model. The logical analysis model of price information entropy, from the verification of this study, can provide investors closer to realizing wealth freedom.

#### *References:*

- [1] Appel, G. (1979). The Moving Average Convergence Divergence Trading Method, Signalert Corp, 150 Great Neck Rd, Great Neck, NY 11021
- [2] C. E. Shannon (1948), A Mathematical Theory of Communication, The Bell System Technical Journal, Vol. 27, pp. 379–423, 623–656, July, October, 1948.
- [3] Edward O. Thorp (1966), Beat the Dealer: A Winning Strategy for the Game of Twenty-One Mass Market
- [4] Johnston, F.R., Boyland, J.E., Meadows, M., and Shale, E. (1999) 'Some properties of a simple moving average when applied to forecasting a time series'. Journal of the Operational Research Society 50(12), 1267–1271.
- [5] Osborne, M.F. (1959) 'Brownian motion in the stock market'. Operations Research 7(2), 145–173.
- [6] Scott Patterson (2012), The Quants: The maths geniuses who brought down Wall Street, stockstotrade.com, <https://stockstotrade.com/types-technical-indicators-infographic/>

### **Contribution of individual authors to the creation of a scientific article (ghostwriting policy)**

Hsueh-Ying Wu carried out the simulation and the optimization.

Jih-Lian Ha has organized and executed the experiments of Section 4.

Shu-Wen Lei was responsible for the Statistics.

Follow: [www.wseas.org/multimedia/contributor-role-instruction.pdf](http://www.wseas.org/multimedia/contributor-role-instruction.pdf)